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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,657	03/24/2000	LEONARD COLIN ANDREWS	89073	2124

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WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
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SUITE 3800  
CHICAGO, IL 60661

EXAMINER
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MICHALSKI, JUSTIN I

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/485,657	<b>Applicant(s)</b> ANDREWS, LEONARD COLIN	
	<b>Examiner</b> Justin Michalski	<b>Art Unit</b> 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. Claims 7, 12-16, and 22-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "source components" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "audio signal source components" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "source components" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "audio components" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "audio components" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "audio source components" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "audio components" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "audio source components" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 24 recites the limitation "audio components" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 recites the limitation "audio source components" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7, 8, 10, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lonsteln et al. (Sound & Video Contractor, "Distributed sound systems come of age", December 20, 1993) (Hereinafter "Lonsteln") in view of Lampen (Belden Electronics Division, "Cable and the Cutting Edge", Sydney, Australia, July 1, 1997).

Regarding Claim 1, Lonsteln discloses a distributed stereo audio system (Fig. 1), including: two or more speakers for the broadcast of stereo audio signals (2<sup>nd</sup> page, Col. 2, stereo operation disclosed under operation of "Duo" unit), a source of stereo audio signals (Fig. 1, Pre-Amp controller), a stereo amplifier to amplify stereo audio signals and drive the speakers (Fig. 1 discloses speaker amplifier at speaker and 2<sup>nd</sup> page, Col. 1, first paragraph under "The components") and a mains operated electrical power supply to provide power to the amplifier (Fig. 1, Power supply); where the amplifier is

located in the same room as the speakers (2<sup>nd</sup> page, Col. 1, first paragraph under "The components" discloses power is amplified at each loudspeaker, i.e. same room), and remote from the signal source and power supply (Fig. 1); and where the amplifier is connected to the signal source and power supply by means of a cable which provides a right and left channel audio from the signal source to the amplifier (2<sup>nd</sup> page, Col. 2, stereo operation disclosed under operation of "Duo" unit) and DC power from the power supply to the amplifier (Fig. 1). Lonsteln does not disclose the cable being a category 5 cable.

Lampen discloses a Category 5 cable allowing the four-pairs to be used for different, even unrelated signals including analog audio. Lampen further discloses the Category 5 cable provides an improved impedance tolerance and improved attenuation (Paragraphs 3 through 5 under "Shared Sheath and New Technology"). Therefore, it would have been obvious to one of ordinary skill in the art to replace the multi-conductor cable disclosed by Lonsteln with the Category 5 multi-conductor cable disclosed by Lampen to take advantage of the impedance tolerance and improved attenuation to transmit the signals.

Regarding Claim 2, Lonsteln further discloses amplifier and speakers in several rooms receive signals from a single source of audio signals (Fig. 1 IMP Pre-Amp Controller).

Regarding Claim 3, Lonsteln further discloses the source provides a selection of components (1<sup>st</sup> page, Col. 3, 3<sup>rd</sup> full paragraph discloses CD and satellite sources), and

different audio signals are provided to different rooms (2<sup>nd</sup> page, Col. 2, two program operation disclosed under operation of "Duo" unit).

Regarding Claim 4, LonsteIn further discloses the volume is set differently in each room (Fig. 1 caption discloses local control).

Regarding Claims 5 and 20, it is well known in the art the amplifiers are based on integrated circuits to reduce the size of the amplifier.

Regarding Claim 7, it is inherent that the greater the input level to an amplifier the greater the output level will be.

Regarding Claim 8, LonsteIn further discloses a manual volume control is included with the amplifier (Fig. 1 caption discloses local control).

Regarding Claim 10, LonsteIn further discloses the amplifier is mounted with a speaker (Fig. 1 discloses speaker amplifier at speaker and 2<sup>nd</sup> page, Col. 1, first paragraph under "The components").

Regarding Claim 16 LonsteIn further discloses the amplifiers receive signals from a pre-amplifier and line-level inputs (i.e. standard line level signals), Fig. 1 and 2<sup>nd</sup> Page, Col. 3, first full paragraph).

Regarding Claim 17, Lloyd further discloses the amplifier accepts speaker signals from another amplifier (pre-amplifier, Fig. 1).

Regarding Claims 18 and 19, it is well known in the art that audio amplifiers contain muting systems in order to disable the audio output and input level trim devices such as equalizers to customize the frequency response of the audio system.

4. Claims 6, 9, 11, 13-15, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lonsteln/Lampen above, and further in view of QED AUDIO PRODUCTS LTD., "An Introduction to Streamline", April 1988, Ashford, Middlesex, England (Hereinafter "QED Audio Products").

Regarding Claims 6 and 21, Lonsteln/Lampen disclose a system as stated apropos of claims 5 and 20. Lonsteln/Lampen do not disclose the amplifier mounted inside an electrical light switch housing. QED Audio Products discloses a multi-room audio system including a room control amplifier mounted flush on the wall (see right hand figure under "The Room Control Amplifier" on page 2 of reference) and further discloses it is intended to be located completely out of sight (page 2, first paragraph under "The Eye and Handset"). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the amplifier mounted inside a light switch housing to hide the amplifier from sight as disclosed by QED Audio Products.

Regarding Claim 9, Lonsteln/Lampen discloses a system as stated apropos of claim 1 above. Lonsteln/Lampen do not disclose a hand-held remote control provided to transmit infrared signals to a receiver mounted with the amplifier. QED Audio Products discloses a hand-held remote control provided to transmit infrared signals to a receiver mounted with the amplifier to control power on/off, volume up/down, and input selection from any room (disclosed under "The eye and handset", "The transmitter", and "Infra-red remote control" headings). Therefore, it would have been obvious to one of ordinary

skill in the art at the time the invention was made to include a hand-held remote to control the functions of the system from any room.

Regarding Claim 11, QED Audio Products further discloses a multi-room audio system including a room control amplifier mounted flush on the wall (see right hand figure under "The Room Control Amplifier" on page 2 of reference) and further discloses it is intended to be located completely out of sight (page 2, first paragraph under "The Eye and Handset").

Regarding Claim 13, Lonsteln further discloses the cable transmitting data (4<sup>th</sup> paragraph under "Shared Sheath and New Technology" heading).

Regarding Claims 14, 15, and 22, it is inherent that signal are modulated before transmission to an infrared emitter in order to transmit the signals through space and that they will be demodulated when received.

Regarding Claim 23 Lonsteln further discloses the amplifiers receive signals from a pre-amplifier and line-level inputs (i.e. standard line level signals), Fig. 1 and 2<sup>nd</sup> Page, Col. 3, first full paragraph).

5. Claims 12, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lonsteln/Lampen/QED Audio Products as applied to claim 11 above, and further in view of Systemline (S4.3 Multi-Room System Installation Manual, undated prior art cited by applicant filed 20 May 2003) (Hereinafter "Systemline").

Regarding Claim 12, Lonsteln/Lampen/QED Audio Products discloses a system as stated apropos of claim 11 above but does not disclose the fascia plate including



status indicators for the amplifier and the audio signal source components. Systemline discloses an audio distribution unit comprising a wall-mounted module to receive commands from a remote control and displays the selected source and status indications during volume change or muting. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a status indicator to display the selected source and relevant status indications as taught by Systemline.

Regarding Claim 24, it is inherent that signals are modulated before transmission to an infrared emitter in order to transmit the signals through space and that they will be demodulated when received.

Regarding Claim 25 Lonsteln further discloses the amplifiers receive signals from a pre-amplifier and line-level inputs (i.e. standard line level signals), Fig. 1 and 2<sup>nd</sup> Page, Col. 3, first full paragraph).

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 1-25 have been considered but are moot in view of the new ground(s) of rejection.


### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM

  
**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**